

Activated carbon filter MS9N-LFX

FESTO



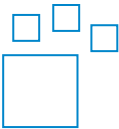
Characteristics

At a glance

- Removes liquid and gaseous oil particles from compressed air using activated carbon
- Elimination of odours and vapours
- Available with filter cartridge for low flow rates, suitable for sealing air and purge air applications
- Prefiltration with micro filter MS-LFM-A (grade of filtration 0.01 µm) is recommended
- Air purity class at the output [1.4.1] acc. to ISO 8573-1

Ordering data - modular system

Link [ms9n-lfx](#)



Configurable product

This product and all its product options can be ordered online via the configurator.

Size

Grid dimension: 90 mm

Standard nominal flow rate:

- 6500 l/min

Pneumatic connection

Depending on the size, different connection types can be selected:

- For individual fittings that are fastened via a female thread.
- Connecting plates with female thread

Bowl type

Bowl guard tanks to integrated metal bowl.

Type of mounting

[WP] Mounting bracket basic design



- Mounting attachment and connector for service unit combination or for individual device with connecting plates
- In conjunction with connection plate MS9-AQ... for wall mounting of a single device

[WPB] Mounting bracket for large wall gap



- For connecting the modules for wall mounting
- In conjunction with connection plate MS9-AQ... for wall mounting of a single device

[WPM] Mounting bracket for hooking in service unit components



- Mounting attachment and connector for service unit combination
- Mount and dismount the service unit combination quickly
- Spacer for maintaining the mounting gap
- Same wall gap for combination with MS6 series using the mounting bracket MS6-WPB

Characteristics

EU certification

Optional device variant EX4 for use in potentially explosive areas of zones 1, 2, 21 and 22

UL certification

Optional device variant UL1, which meets the safety requirements for the Canadian and US markets.

Flow direction

Available with flow in the opposite direction.

Type code

001	Series	
MS	MS series	
002	Size	
9	Grid dimension 90 mm	
003	Function	
LFX	Activated carbon filter	
004	Pneumatic connection	
3/4	Female thread G3/4	
1	Female thread G1	
AGD	Sub-base G1/2	
AGE	Sub-base G3/4	
AGF	Sub-base G1	
AGG	Connecting plate G1 1/4	
AGH	Connecting plate G1 1/2	
AQR	Sub-base 1/2 NPT	
AQS	Sub-base 3/4 NPT	
AQT	Sub-base 1 NPT	
AQU	Sub-base 1 1/4 NPT	
AQV	Sub-base 1 1/2 NPT	
N3/4	Female thread 3/4 NPT	
N1	Female thread 1 NPT	

005	Bowl type	
U	Aluminium	
006	Type of mounting	
	Without mounting bracket	
WP	Mounting bracket basic design	
WPB	Mounting bracket for large wall gap	
WPM	Mounting bracket for hooking in service unit components	
007	EU certification	
	None	
EX2	II 3GD to EU Explosion Protection Directive (ATEX)	
EX4	II 2GD	
008	UL certification	
	None	
UL1	cULus ordinary location for Canada and USA	
009	Flow direction	
	Flow direction from left to right	
Z	Flow direction from right to left	

Datasheet

General technical data

Pneumatic connection, port 1 ¹⁾	1 NPT
Pneumatic connection, port 2 ¹⁾	1 NPT
Size	9
Design	Activated carbon filter
Type of mounting	Either: In-line installation With accessories
Mounting position	Vertical +/-5°
Air purity class at output	Compressed air according to ISO 8573-1:2010 [3:4:1]
Residual oil content	0.003 mg/m³

1) Other connection sizes possible via configurator. More information www.festo.com/pdp/MS9_LFX.

Standard nominal flow rate qnN

Max. standard flow rate for clean air class	6,500 l/min
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Operating and environmental conditions

Operating pressure	0 ... 20 bar
Operating medium	Compressed air according to ISO 8573-1:2010 [3:4:2]
Ambient temperature	-10 ... 60°C
Media temperature	5 ... 30°C
Storage temperature	-10 ... 60°C
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress

1) More information www.festo.com/x/topic/crc

ATEX

ATEX category gas	II 2G
Explosion ignition protection type for gas	Ex h IIC T6 Gb X
ATEX category dust	II 2D
Explosion ignition protection type for dust	Ex h IIIC T60°C Db X
Explosion ambient temperature	-10°C ≤ Ta ≤ +60°C
CE mark (see declaration of conformity) ¹⁾	To EU Explosion Protection Directive (ATEX)
UKCA marking (see declaration of conformity) ²⁾	To UK EX instructions

1) More information www.festo.com/catalogue/ms-lfx → Support/Downloads.

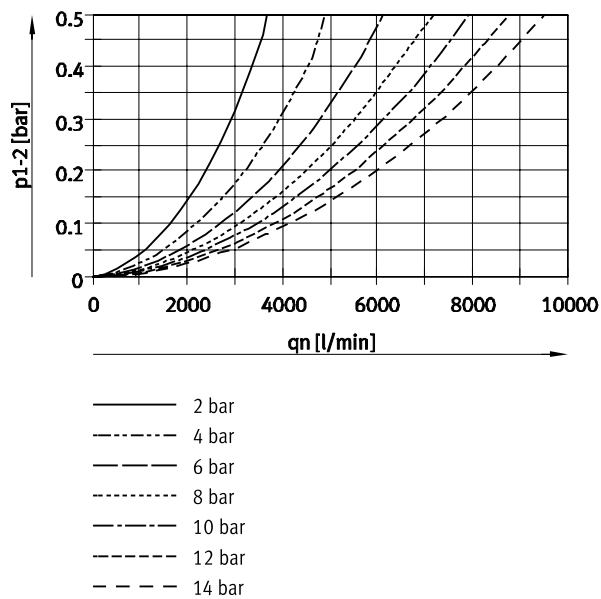
2) More information www.festo.com/catalogue/ms-lfx → Support/Downloads.

Materials

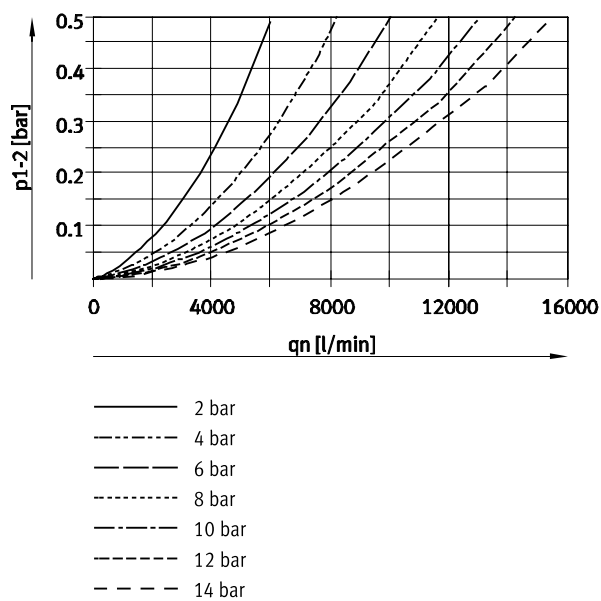
Material housing	Die-cast aluminium
Material bowl	Wrought aluminium alloy
Material screen	PA
Material filter	Activated carbon
Material seals	NBR
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Datasheet

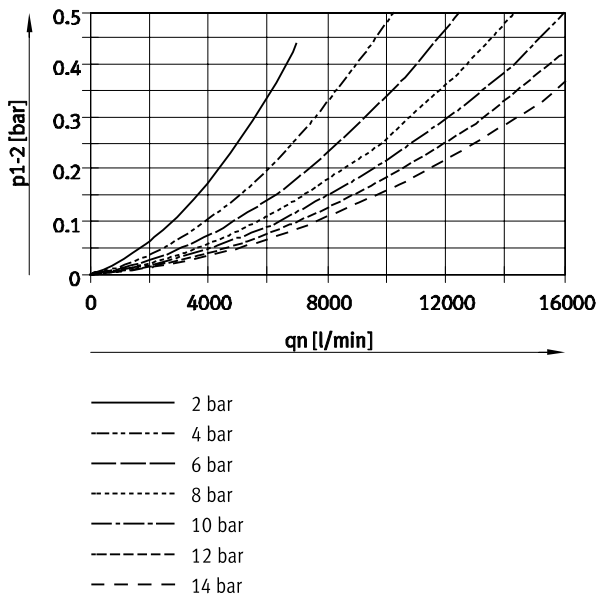
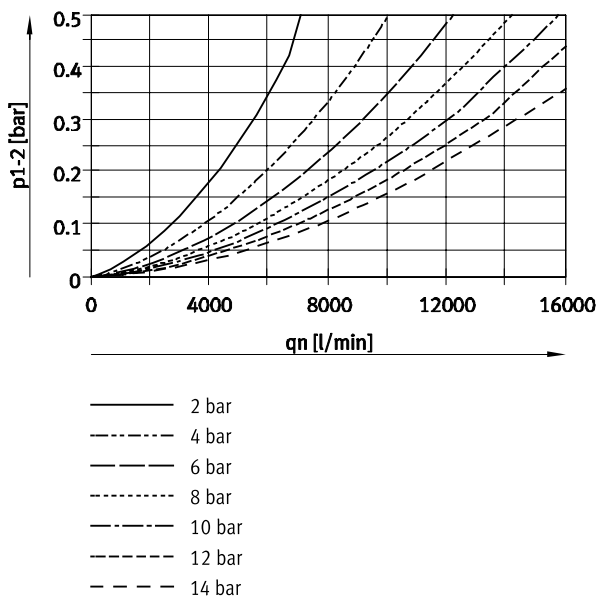
Standard flow rate q_n as a function of differential pressure Δp_{1-2} (pneumatic connection 1/2NPT)



Standard flow rate q_n as a function of differential pressure Δp_{1-2} (pneumatic connection 3/4NPT)

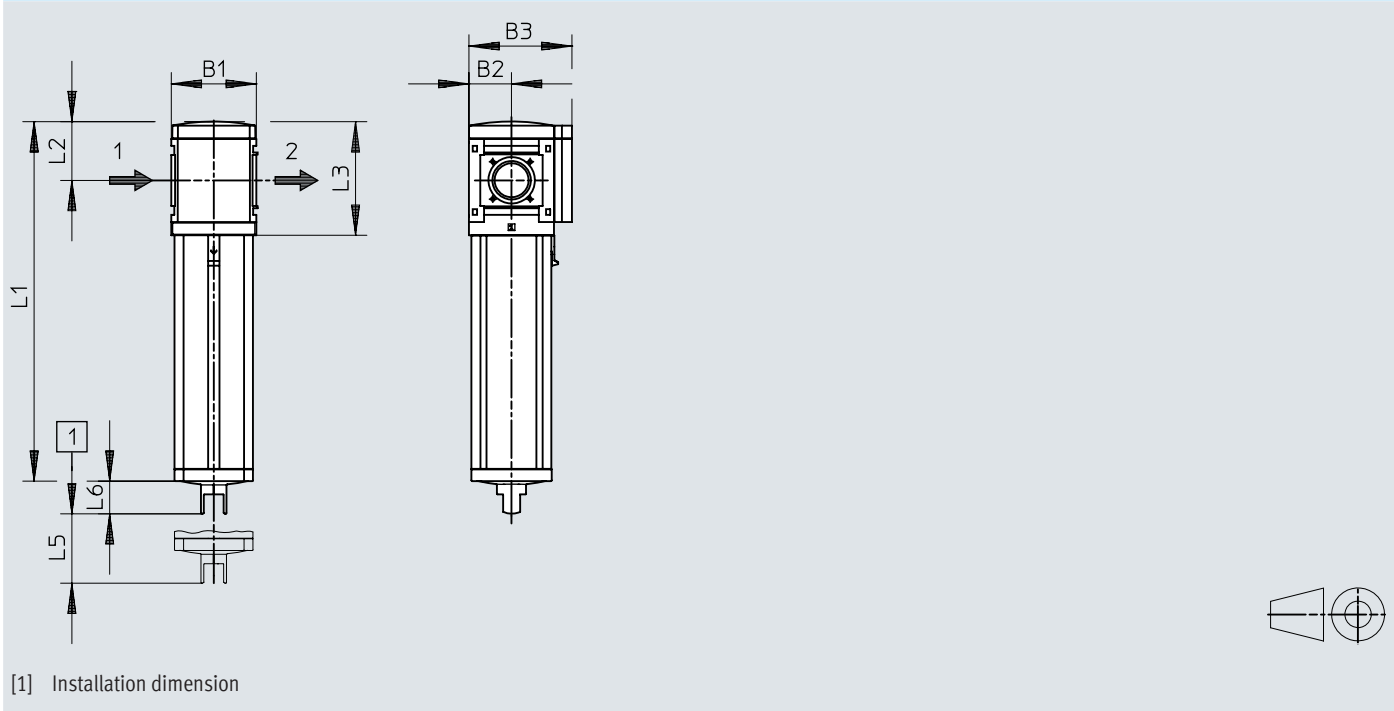


Datasheet

Standard flow rate q_n as a function of differential pressure Δp_{1-2} (pneumatic connection 1NPT)Standard flow rate q_n as a function of differential pressure Δp_{1-2} (pneumatic connection 11/2NPT)

Dimensions

Dimensions – Module without connecting thread, without connecting plate G Download CAD data www.festo.com

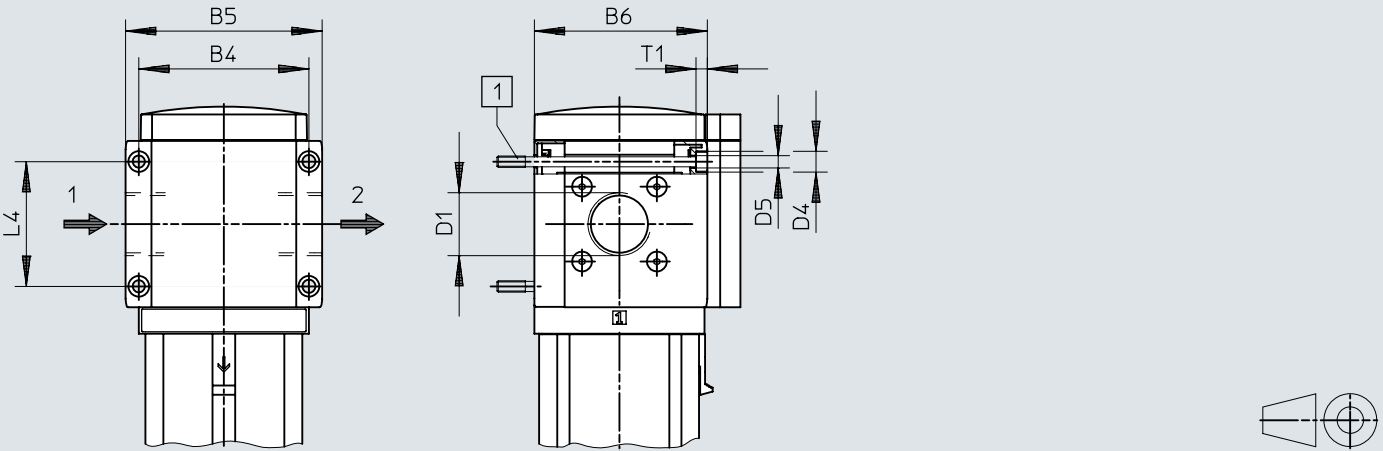


	B1	B2	B3	L1	L2	L3	L5	L6
MS9-LFX-G	90	45	109	380,5	62	120	50	34,5

Dimensions

Dimensions – Connecting thread/connecting plate with female thread 3/4, 1, N3/4, N1

Download CAD data www.festo.com



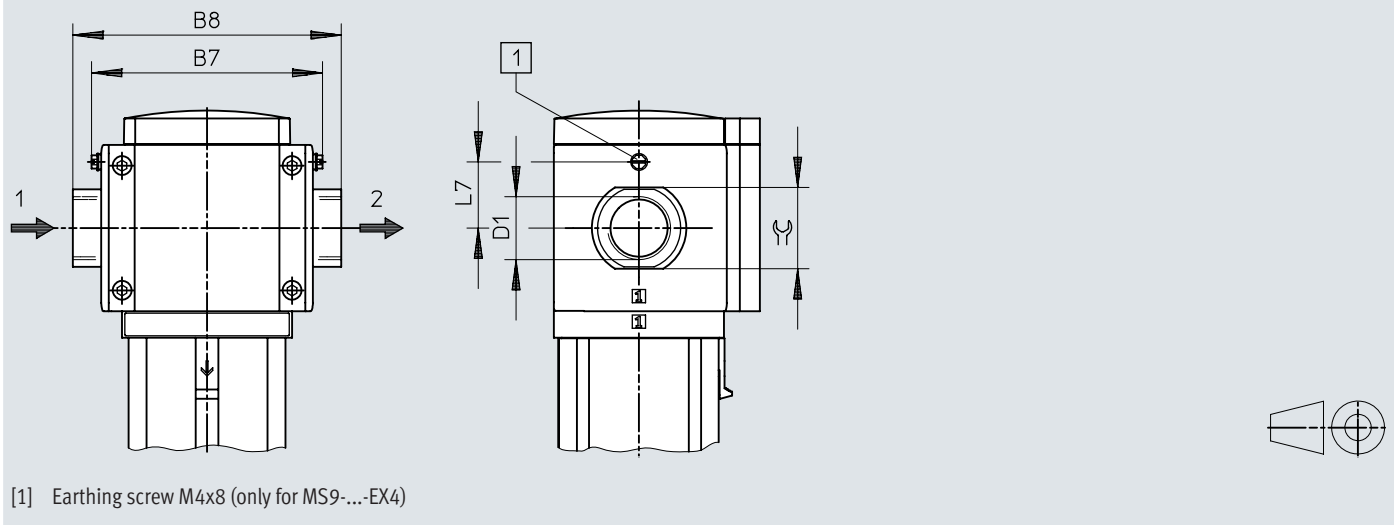
[1] Retaining screw M6xmin.90 according to DIN 912 (not included in the scope of delivery) for wall mounting without mounting bracket

	B4	B5	B6	D1	L4
MS9-LFX-3/4	90	104	91,5	G3/4	66
MS9-LFX-1				G1	
MS9-LFX-N3/4	90	104	91,5	3/4 NPT	66
MS9-LFX-N1				1 NPT	

Dimensions


Dimensions – Connecting thread/connecting plate with connecting plate
AG.../AQ...

Download CAD data www.festo.com



	B7		B8	D1	L7	≅
		EX4			EX4	
MS9-LFX-AGD	112	122	132	G1/2	35	30
MS9-LFX-AGE			132	G3/4		36
MS9-LFX-AGF			142	G1		41
MS9-LFX-AGG			162	G1 1/4		50
MS9-LFX-AGH			176	G1 1/2		55
MS9-LFX-AQR	112	122	132	1/2 NPT	35	30
MS9-LFX-AQS			132	3/4 NPT		36
MS9-LFX-AQT			142	1 NPT		41
MS9-LFX-AQU			162	1 1/4 NPT		50
MS9-LFX-AQV			176	1 1/2 NPT		55

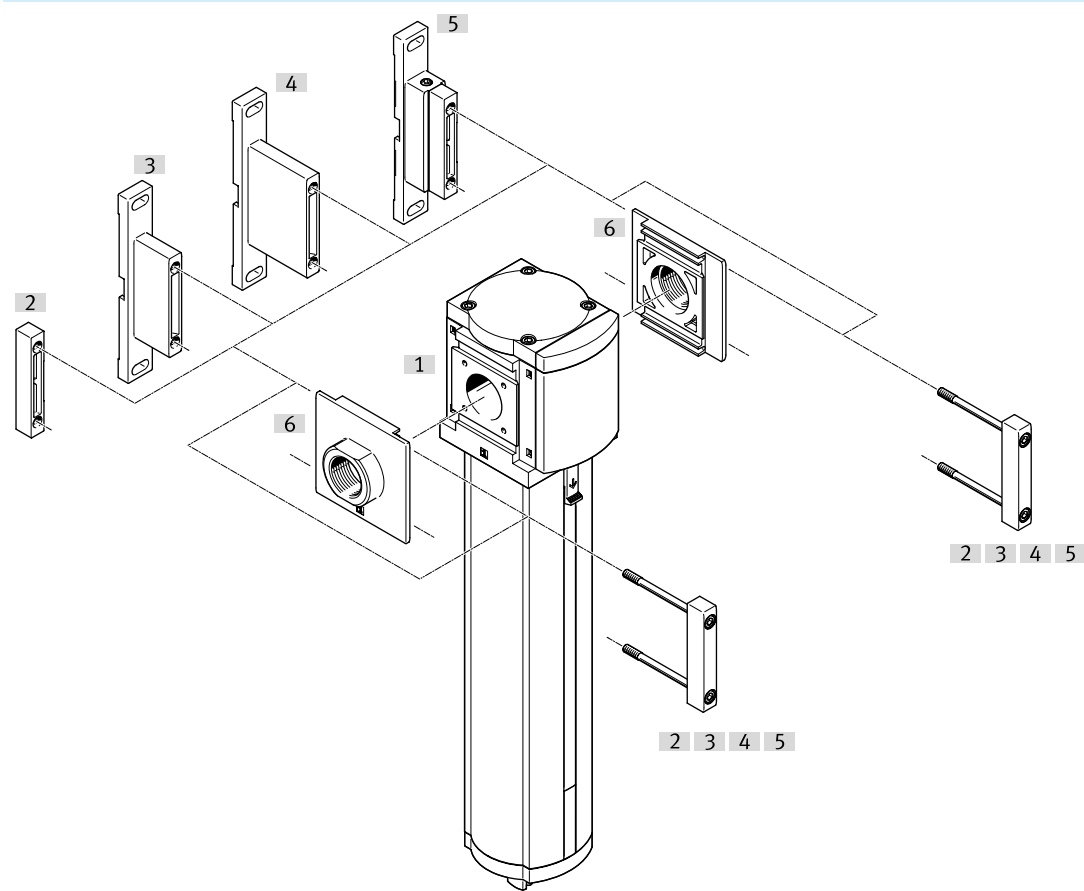
Ordering data

Ordering data				
	Pneumatic connection, port 1	Product weight	Part no.	Type
	1 NPT	2,000 g	553034	MS9-LFX-N1-U

Ordering data – Modular product system			
	Short type code	Part no.	Type
	MS9-LFX	552942	MS9-LFX

Peripherals


Peripherals overview



Accessories		→ Link
Type/order code	Description	
[1] Micro filter MS9N-LFX		ms9-lfx
[2] Module connector MS9-MV	For device combinations and individual devices with connecting plate	13
[3] Mounting bracket MS9-WP	For an individual device	13
[4] Mounting bracket MS9-WPB	For an individual device	13
[5] Mounting bracket MS9-WPM	For an individual device	14
[6] Connecting plate SET MS9-A...	For device combinations	13
[7] Activated carbon filter cartridge MS9-LFX	Not shown	ms9-lfm


Accessories

Activated carbon filter cartridge – MS9-LFX


	Size	Material filter	Corrosion resistance class CRC ¹⁾	Part no.	Type
	9	Activated carbon	2 - Moderate corrosion stress	552946	MS9-LFX

1) More information at www.festo.com/x/topic/kbk


Connecting plate SET MS9-A...

	Size	Pneumatic connection, port 1	Product weight	Part no.	Type
	9	1/2 NPT	300 g	552959	MS9-AQR
		3/4 NPT		552960	MS9-AQS
		1 NPT		552961	MS9-AQT
		1 1/4 NPT	400 g	552962	MS9-AQU
		1 1/2 NPT		552963	MS9-AQV


Module connector MS9-MV

	Size	Product weight	Part no.	Type
	9	110 g	552950	MS9-MV

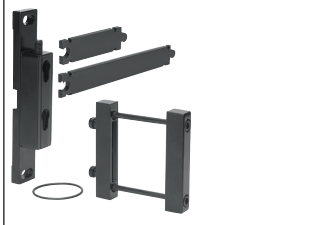
Mounting bracket MS9-WP

	Size	Product weight	Part no.	Type
	9	180 g	552947	MS9-WP

Mounting bracket MS9-WPB

	Size	Product weight	Part no.	Type
	9	210 g	552949	MS9-WPB

Accessories

Mounting bracket MS9-WP				
	Size	Product weight	Part no.	Type
	9	220 g	552948	MS9-WPM